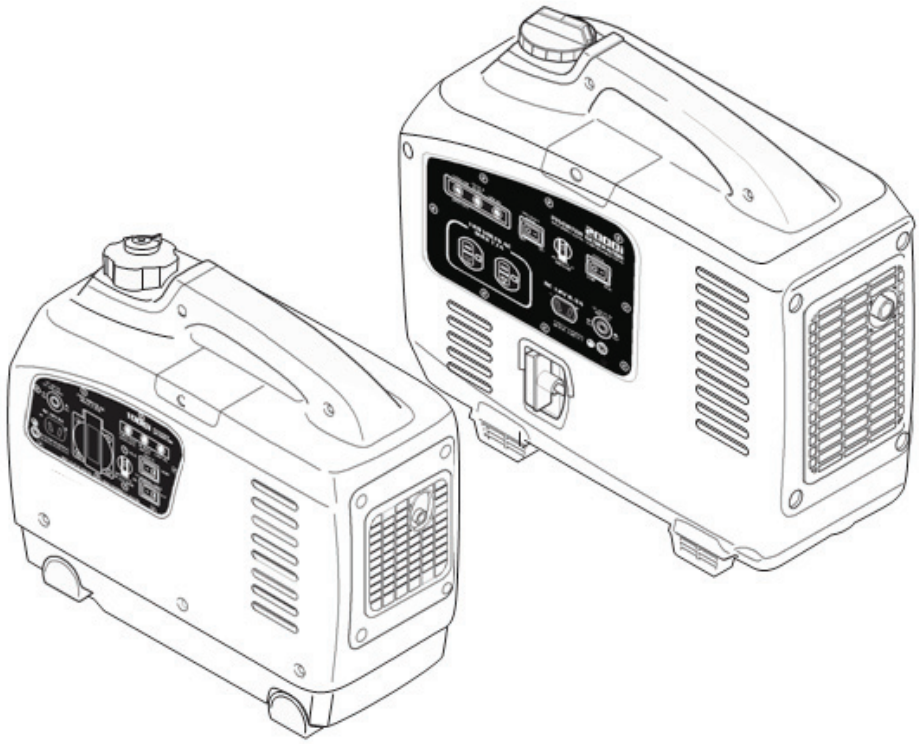
Inverter Generator

Owner's Manual Guide
D'Utilisation

Manual del Propietario



SF1000
SF2200

For product inquires or support, please visit www.evopower.co.uk or call our registered offices support number on 01646 66 38 48.

Pour obtenir des renseignements sur les produits ou pour du soutien technique, visitez notre site à l'adresse www.evopower.co.uk (en anglais seulement) ou composez notre numéro sans frais 01646 66 38 48

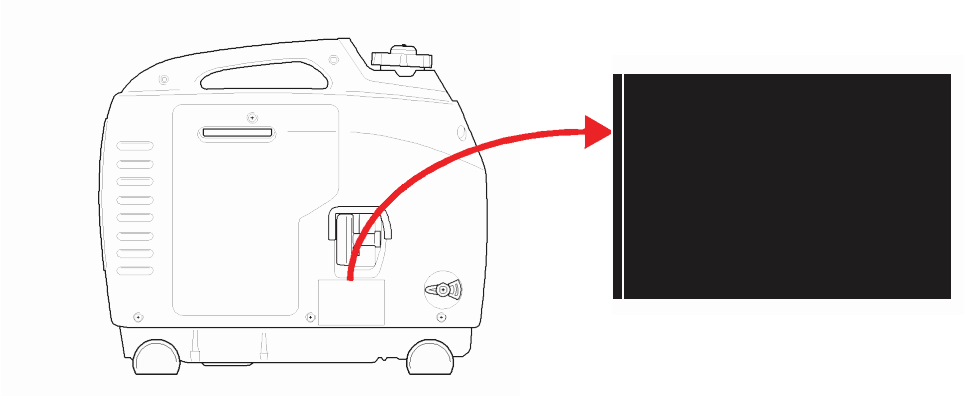
Si tiene preguntas acerca de los productos o requiere de asistencia, visite www.evopower.co.uk o llame gratis al 01646 66 38 48.

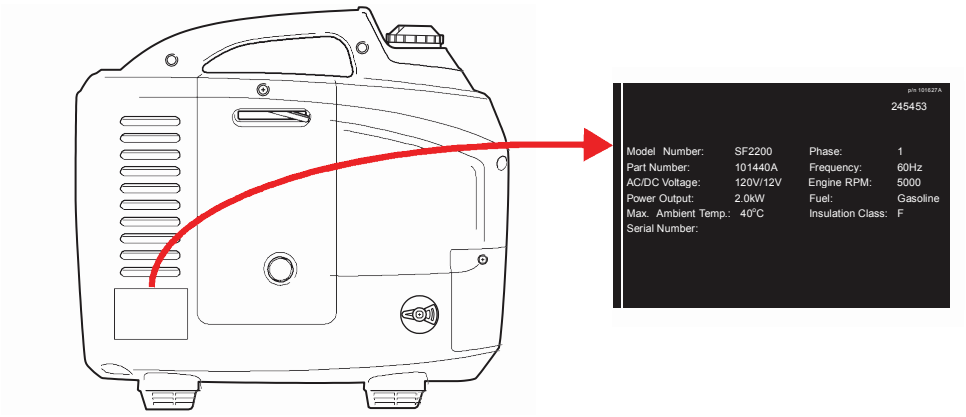
Congratulations on owning a Evopower inverter generator!

WARNING
This manual contains important instructions for operating this generator. For your safety, and the safety of others, be sure to read this manual thoroughly before operating the generator. Failure to properly follow all instructions and precautions can cause you and others to be seriously hurt or killed.

Please use the spaces provided below to record important information about your generator. You may be asked to provide this information should you require product service or support.

Identification information specific to your generator (model number and serial number) can be found on the generator nameplate.





Date of Purchase: _____

Store/Dealer Purchased From: _____

Generator Model Number: _____

Generator Serial Number: _____

Genpower Ltd, Unit 1, Dowty Park
Milford Haven, Pembrokeshire,
United Kingdom SA73 2RS
TEL 01646 663848
www.evopower.co.uk

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PRODUCT REGISTRATION

To register your product, please complete the information below and mail to the address at the end of the form or register online at **www.Evopowergenerators.com**. 18-digit serial number must be completed in order for warranty to be activated.

1 - PERSONAL INFORMATION

FIRST NAME _____

LAST NAME _____

PHONE _____

EMAIL _____

STREET ADDRESS _____

CITY, STATE, ZIP _____

COUNTRY _____

☐ CHECK HERE TO RECEIVE ANNUAL MAINTENANCE REMINDERS AND SPECIAL OFFERS FROM EVOPOWER GENERATORS

☐ CHECK HERE TO RECEIVE INFORMATION FROM OTHER COMPANIES VIA EMAIL, UNDERSTANDING YOUR EMAIL ADDRESS MAY BE SHARED OR COMBINED WITH INFORMATION FROM OTHER SOURCES

2 - PRODUCT INFORMATION

DATE OF PURCHASE:

___/___/____

MM DD YYYY

***MODEL NUMBER:** _____

***SERIAL NUMBER (18-digits):**

*Found on nameplate of generator

PURCHASE LOCATION:

☐ IN-STORE

☐ ONLINE

STORE NAME: _____

PURCHASE PRICE: $_____.00

FEATURES INFLUENCING PRODUCT PURCHASE:

☐ BRAND REPUTATION ☐ EASE OF USE

☐ PORTABILITY ☐ SIZE / WEIGHT

☐ POWER RATING ☐ STYLE/APPEARANCE

☐ PRICE ☐ WARRANTY

HOW DID YOU BECOME AWARE OF THIS PRODUCT?

☐ IN-STORE ☐ RADIO/TV

☐ INTERNET ☐ STORE CIRCULAR

☐ PRINT ☐ WORD OF MOUTH

OTHER BRANDS CONSIDERED WHEN SHOPPING FOR THIS PRODUCT:

_____

PRIMARY USE FOR PRODUCT:

☐ TOOL POWER

☐ RECREATION POWER

☐ EMERGENCY POWER

PRIMARY LOCATION FOR PRODUCT USE:

☐ HOME

☐ WORK

TYPE OF WORK, IF PRODUCT BEING USED FOR PROFESSION:

_____

WHAT OTHER TYPE OF POWER EQUIPMENT ARE YOU INTERESTED IN PURCHASING IN THE FUTURE?

_____

WHO DECIDED TO PURCHASE THIS PRODUCT?

_____

3 - DEMOGRAPHIC INFORMATION

GENDER:

- ☐ MALE
- ☐ FEMALE

MARITAL STATUS:

- ☐ MARRIED
- ☐ SINGLE

DATE OF BIRTH:

____/____/_____

MM DD YYYY

INCLUDING YOURSELF, HOW MANY PEOPLE LIVE IN YOUR HOUSEHOLD:

_____

NUMBER OF CHILDREN UNDER 18 LIVING IN YOUR HOUSEHOLD:

_____

PRIMARY RESIDENCE:

- ☐ OWN
- ☐ RENT

EDUCATION:

- ☐ SOME HIGH SCHOOL
- ☐ HIGH SCHOOL DIPLOMA
- ☐ COLLEGE DEGREE
- ☐ GRADUATE DEGREE

HOUSEHOLD INCOME:

- ☐ LESS THAN $15,000
- ☐ $15,000 - $29,999
- ☐ $30,000 - $49,999
- ☐ $50,000 - $79,999
- ☐ $80,000 - $99,999
- ☐ $100,000 - $124,999
- ☐ $125,000 - $149,999
- ☐ $150,000 - $174,999
- ☐ $175,000 - $199,999
- ☐ $200,000 OR OVER

PRIMARY METHOD OF PURCHASING HOUSEHOLD ITEMS:

- ☐ IN-STORE
- ☐ ONLINE
- ☐ TV
- ☐ MAIL ORDER

TYPES OF CREDIT CARDS HELD BY HOUSEHOLD MEMBERS:

- ☐ VISA / MASTERCARD
- ☐ DISCOVER
- ☐ AMERICAN EXPRESS
- ☐ GAS / RETAIL
- ☐ OTHER
- ☐ NONE

HOUSEHOLD INTERESTS:

- ☐ HOME IMPROVEMENT
- ☐ AUTOMOTIVE WORK
- ☐ CAMPING
- ☐ OTHER _____

THANK YOU FOR REGISTERING YOUR PRODUCT. THE INFORMATION YOU PROVIDED MAY BE USED FOR MARKETING PURPOSES IN ORDER TO OFFER YOU VARIOUS PRODUCT INFORMATION AND OFFERS.

☐ CHECK HERE IF YOU DO NOT WISH TO BE CONTACTED ABOUT SPECIAL OFFERS.

PLEASE RETURN THIS FORM TO THE FOLLOWING ADDRESS:

Genpower Ltd. (Evopower Manufacturer)
Unit 1, Dowty Park, Milford Haven, Pembrokeshire
United Kingdom, SA73 2RS

PLEASE MAIL THIS FORM IN A SEALED ENVELOPE. DO NOT STAPLE.

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SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY RULES

WARNING	
	ANYONE using or servicing this generator must read, understand, and follow all safety and operation instructions provided in the product manual. Failure to closely follow these instructions can result in circumstances leading to death, serious injury, and property damage.

NOTE:

Since there are many variations in the circumstances surrounding the installation, operation, service, and maintenance of this generator, we cannot possibly anticipate or provide advice or safety messages to cover every situation.

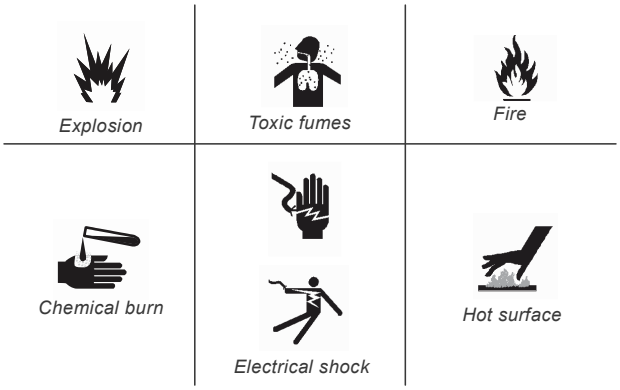
Signal Words

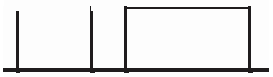
Safety messages are provided throughout this manual to help prevent personal injury and equipment damage. All safety messages are introduced by a signal word indicating the hazard level.

DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.
WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.
NOTICE	Indicates a situation which, if not avoided, may result in damage to the generator components.

Hazard Symbols and Meanings

In addition to the signal words, the following symbols may be used to draw your attention to specific types of hazards.



DANGER	
Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.	
 NEVER use inside a home or garage, EVEN IF doors and windows are open.	Only use OUTSIDE and far away from windows, doors, and vents.

Safety Messages

Electric Shock Hazards

WARNING

Generators produce powerful voltage that can cause death or great physical harm.

- NEVER touch bare wires or receptacles.
- NEVER use generator with electrical cords that are worn, frayed, bare, or otherwise damaged.
- NEVER operate generator in rain or snow, or when the generator is set on wet surface.
- Keep the generator out of reach of children, pets, and untrained people.

Fire and Burn Hazards

⚠WARNING

Fuel and its vapors are extremely flammable and explosive under certain conditions.

- Refuel generator only outdoors, in a well-ventilated area.
- NEVER enclose the generator in any structure.
- Keep generator at least 6 feet (2 meters) away from buildings, other equipment, and combustible materials during operation.
- NEVER fill fuel tank while the engine is running. Turn generator OFF and allow to cool before filling with fuel.
- NEVER smoke or allow flames or sparks near the generator or where gasoline is stored.
- NEVER overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, be sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapor.

WARNING

The muffler becomes very hot during operation and remains hot for a while after stopping the engine.

- NEVER touch hot surfaces and avoid hot gases.
- Let engine cool before storing the generator indoors.

Medical and Life Support Uses

WARNING

- In case of emergency, call 911 immediately.
- NEVER use this product to power life support devices or life support appliances.
- NEVER use this product to power medical devices or medical appliances.
- Inform your electricity provider immediately if you or anyone in your household depends on electrical equipment to live.
- Inform your electrical provider immediately if a loss of power would cause you or anyone in your household to experience a medical emergency.

Generator Damage Hazards

NOTICE

Improper treatment or misuse of generator can cause permanent damage.

- NEVER modify generator in any way.
- NEVER tamper with governed speed. Generator supplies correct rated frequency and voltage when running at governed speed.
- Damage to generator caused by misuse or modification is not covered under Warranty.

Location of Important Labels

Your generator has several labels which provide important safety and maintenance information. Samples of these labels are provided below. Should any of these labels become illegible or damaged, call 01646 663848 for replacements.

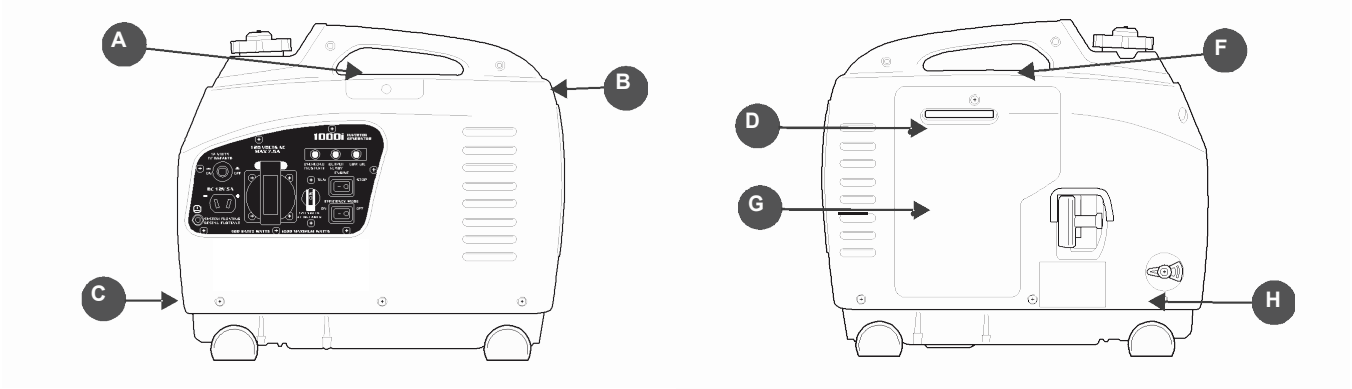


FIGURE 1: SF1000 Model Label Locations

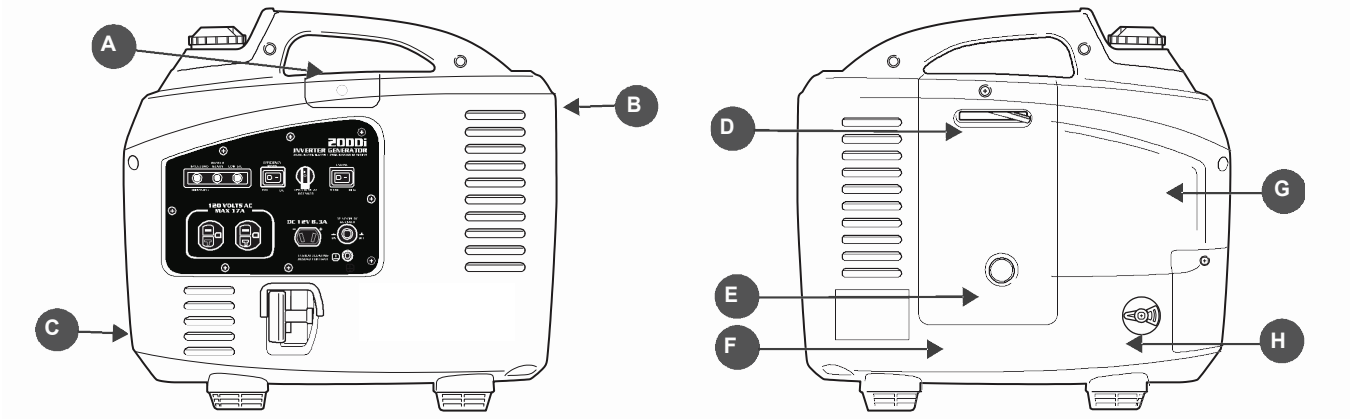
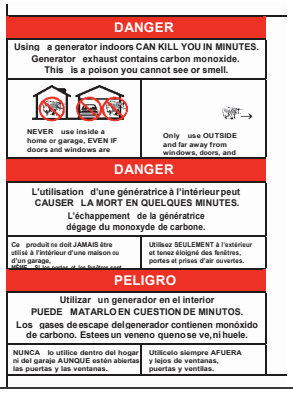


FIGURE 2: SF2200 Model Label Locations

	PRODUCT LABEL	PART NUMBER
A	 DANGER Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell. NEVER use inside a home or garage, EVEN IF doors and windows are Only use OUTSIDE and far away from windows, doors, and DANGER L'utilisation d'une génératrice à l'intérieur peut CAUSER LA MORT EN QUELQUES MINUTES. L'échappement de la génératrice dégage du monoxyde de carbone. Ce produit ne doit JAMAIS être utilisé à l'intérieur d'une maison ou d'un garage, Utilisez SEULEMENT à l'extérieur et tenez éloigné des fenêtres, portes et prises d'air ouvertes. PELIGRO Utilizar un generador en el interior PUEDE MATARLO EN CUESTION DE MINUTOS. Los gases de escape del generador contienen monóxido de carbono. Estees un veneno que no se ve, ni huele. NUNCA lo utilice dentro del hogar ni del garaje AUNQUE estén abiertas las puertas y las ventanas. Utilícelo siempre AFUERA y lejos de ventanas, puertas y ventilas.	101589A
B		101591A

Location of Important Labels

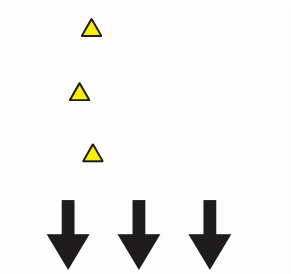
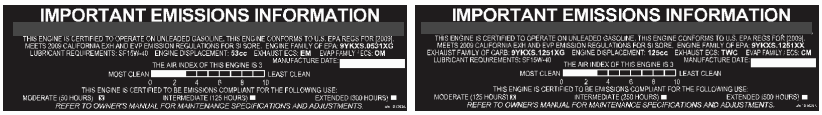
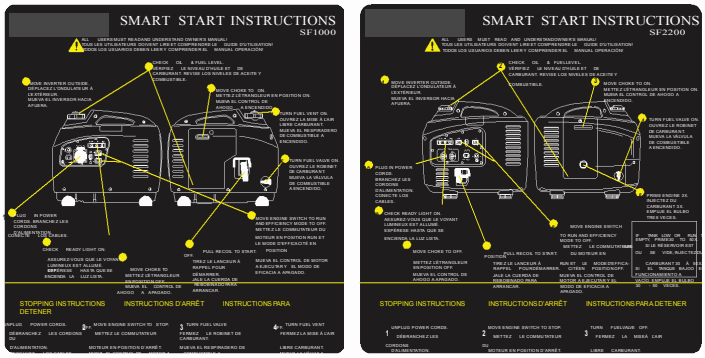
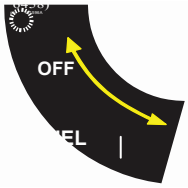
C		101588A
D		101605A (SF1000 Model) 101610A (SF2200 Model)
E		101726A (SF2200 Model)
F		101590A (SF1000 Model) 101628A (SF2200 Model)
G		101596A* (SF1000 Model) 101597A* (SF2200 Model)
H		101592A

TABLE 1. Safety Labels

WARNING

* The Smart Start instruction label is NOT intended to replace information provided in this Owner's Manual. Be sure to thoroughly read and understand all information provided in the Owner's Manual before operating the generator. Failure to properly follow all instructions and precautions can cause you and others to be seriously injured or killed.

GETTING STARTED

Use the information in this section to get your generator ready for operation.

WARNING	
	ANYONE using this generator must read, understand, and follow all safety and operation instructions provided in the product manual. Failure to closely follow these instructions can result in circumstances leading to death, serious injury, and property damage.

Package Checklist

CAUTION	
	Generator is heavy! Obtain assistance to lift the generator to avoid back or other bodily injury.

Verify that all of the following items are included in the generator package:

- Inverter Generator
- Owner's Manual
- Oil Fill Container
- Oil Drain Pipe
- Spark Plug Wrench
- Screwdriver Handle
- Screwdriver Universal Bit

Inspect for Damage

Carefully inspect generator for any damage that may have occurred during shipment. If loss or damage is noted after opening, separate damaged materials and call 01646 663848.

Record Generator Information

Write down the identification information specific to your generator in the spaces provided on the inside cover of this Owner's Manual. This information is located on the generator nameplate (see illustration below).

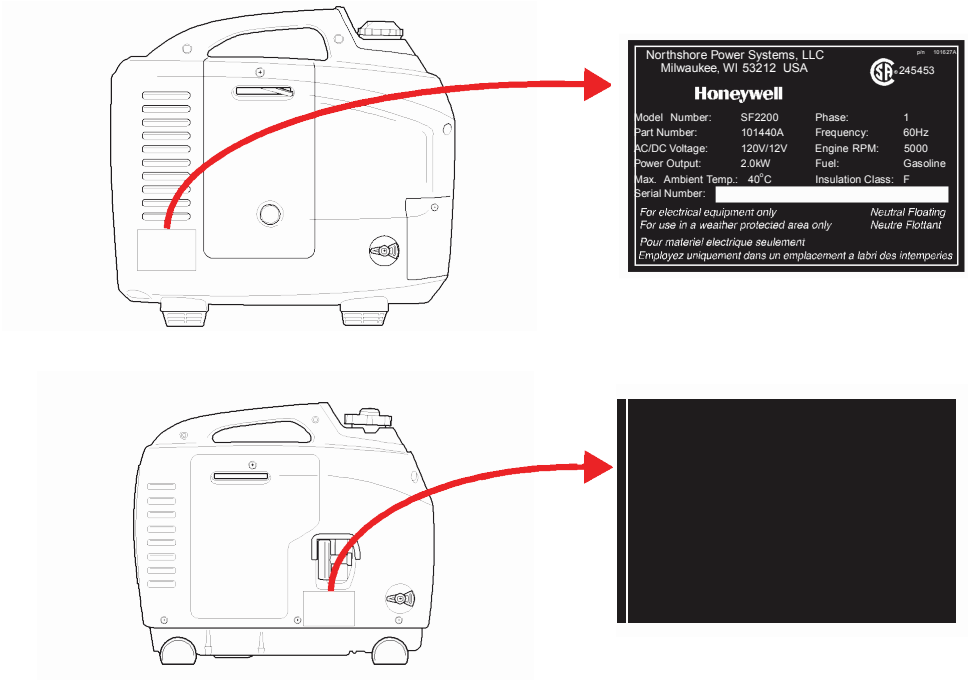


FIGURE 3: Generator Nameplate Location

Grounding the Generator

WARNING	
	Generator must be grounded to prevent electrical shock from faulty appliances.
• Before using generator, consult a qualified electrician, electrical inspector, or local agency having jurisdiction for local codes or ordinances that apply to the intended use of generator.	

The National Electric Code requires the generator to be connected to an earth ground. Before using the generator, connect a copper wire (minimum 14 AWG) from the ground terminal (see Figure 4) to an earth ground. Consult a licensed electrician for proper grounding methods.

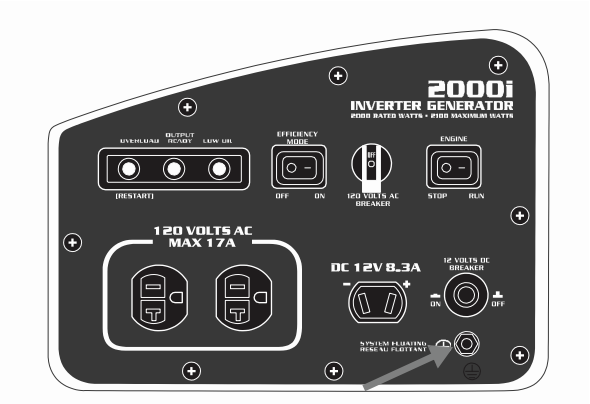


FIGURE 4: Ground Terminal (SF2200 model illustrated)

NOTE:

The system ground is not connected to the AC neutral wire. If using a receptacle tester, it will not show the same ground circuit condition as for a home receptacle.

Special Requirements

There may be Federal or State Occupational Safety and Health Administration (OSHA) regulations, local codes, or ordinances that apply to the intended use of generator. Please consult a qualified electrician, electrical inspector, or the local agency having jurisdiction.

- In some areas, generators are required to be registered with local utility companies.
- If generator is used at a construction site, there may be additional regulations which must be observed.

Using Generator for Back-up Power

DANGER	
Before connecting to a building's electrical system, consult your local utility company or a qualified electrician. Improper connections to a building's electrical system can be deadly.	
	Electrical current from generator can feedback into utility lines. Such feedback may electrocute utility company workers or others who contact utility lines during a power outage.
	Electrical current can feedback into generator. When utility power is restored, generator may explode, burn, or cause fires in building's electrical system.

The National Electric Code requires any generator connected to a building's electrical wiring utilize a transfer switch installed by a licensed electrician.

What is a transfer switch?

A transfer switch is a device that allows switching from utility power to emergency generator power. The transfer switch is either a manual switch, an automatic switch, or a combination of manual and automatic. During a power outage, the transfer switch isolates emergency circuits from the utility line, allowing for efficient operation of the generator without back-feeding into utility power.

COMPONENTS

Use information provided in this section to become familiar with your generator's components.

CAUTION	
	The information below is provided for reference only. Refer to "OPERATION" on page 11 for instructions on operating generator.
	Generator is heavy! Obtain assistance to lift the generator to avoid back or other bodily injury.

Accessories

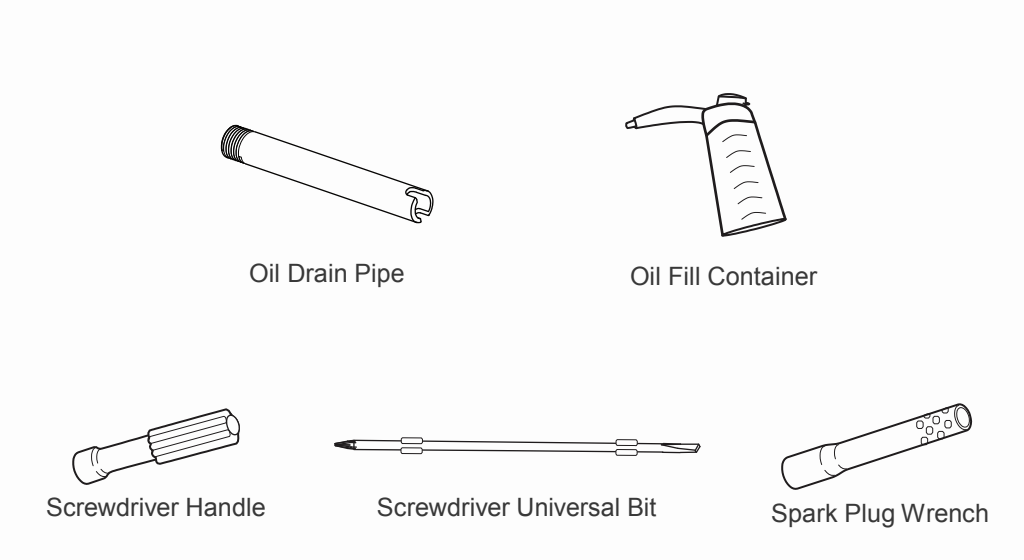
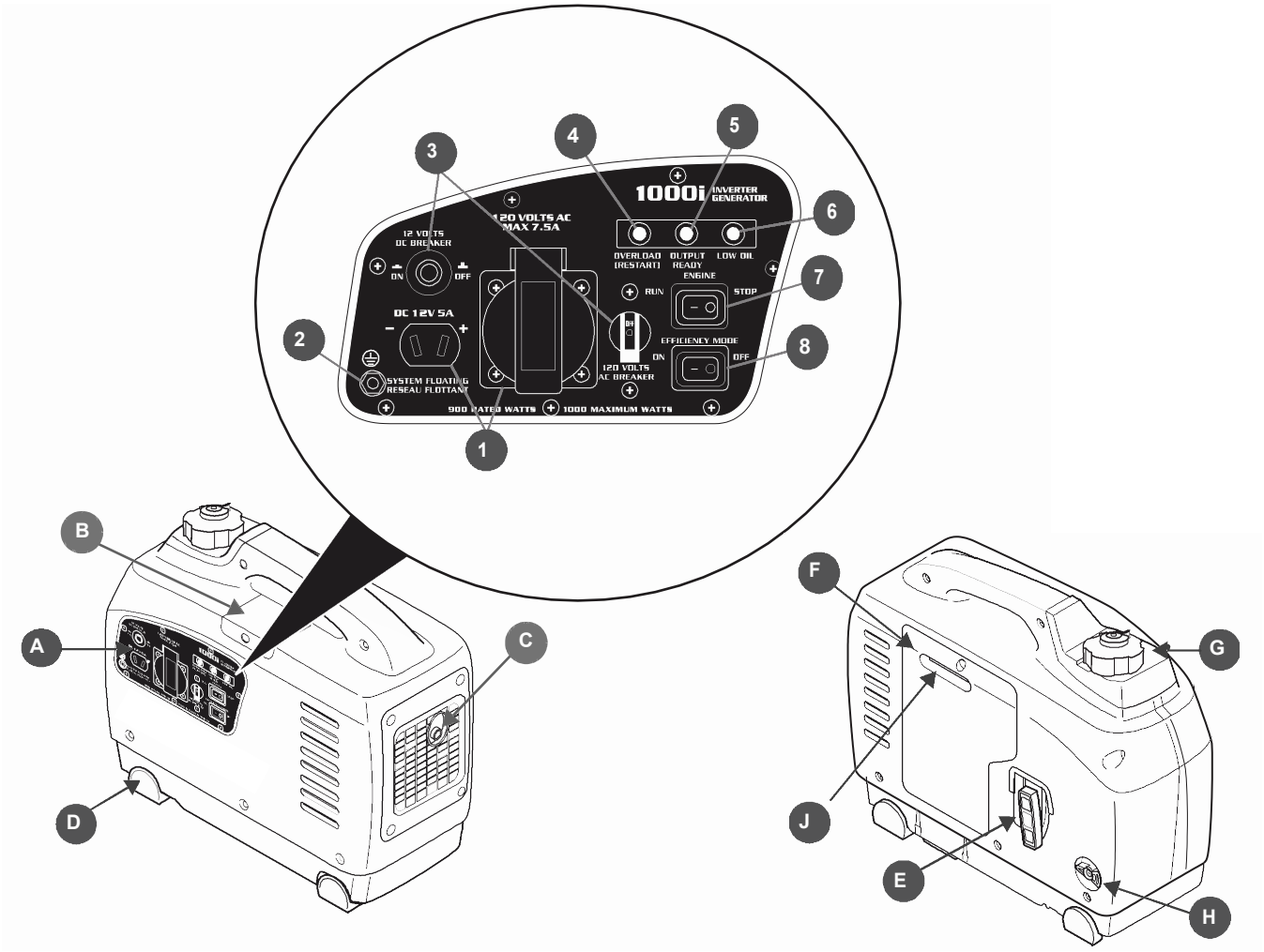


FIGURE 5: Inverter Accessories

Front and Back View

SF1000 Model



A—Control Panel

1. *Outlets*

125VAC outlet(s) (NEMA 5-15R [SF1000 model] and NEMA 5-20R [SF2200 model]) to connect 120V appliances to generator for power.

DC outlet ranges from 12 to 18 volts and is unregulated. This outlet should not be used for battery charging.

WARNING	
	NEVER use unapproved DC cables as this can result in circumstances leading to death, serious injury, and property damage. ALWAYS use Honeywell DC accessory cables (sold separately) available from a Evopower dealer.

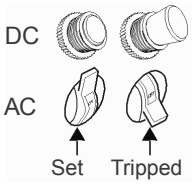
2. *Ground Terminal*

Connects generator to ground wire for grounding protection.

CAUTION	
	Generator must be grounded to prevent electrical shock from faulty appliances. See page 6.

3. *Breakers*

Protect circuits from damage caused by overload or short-circuit by stopping flow of electricity from generator to the appliance. If there is no power at outlets, see “Troubleshooting” on page 27.



4. *Overload Indicator Light*

Illuminates red when the generator is overloaded or if there is a short circuit in a connected appliance. Turn the generator off immediately and determine the reason for the overload.

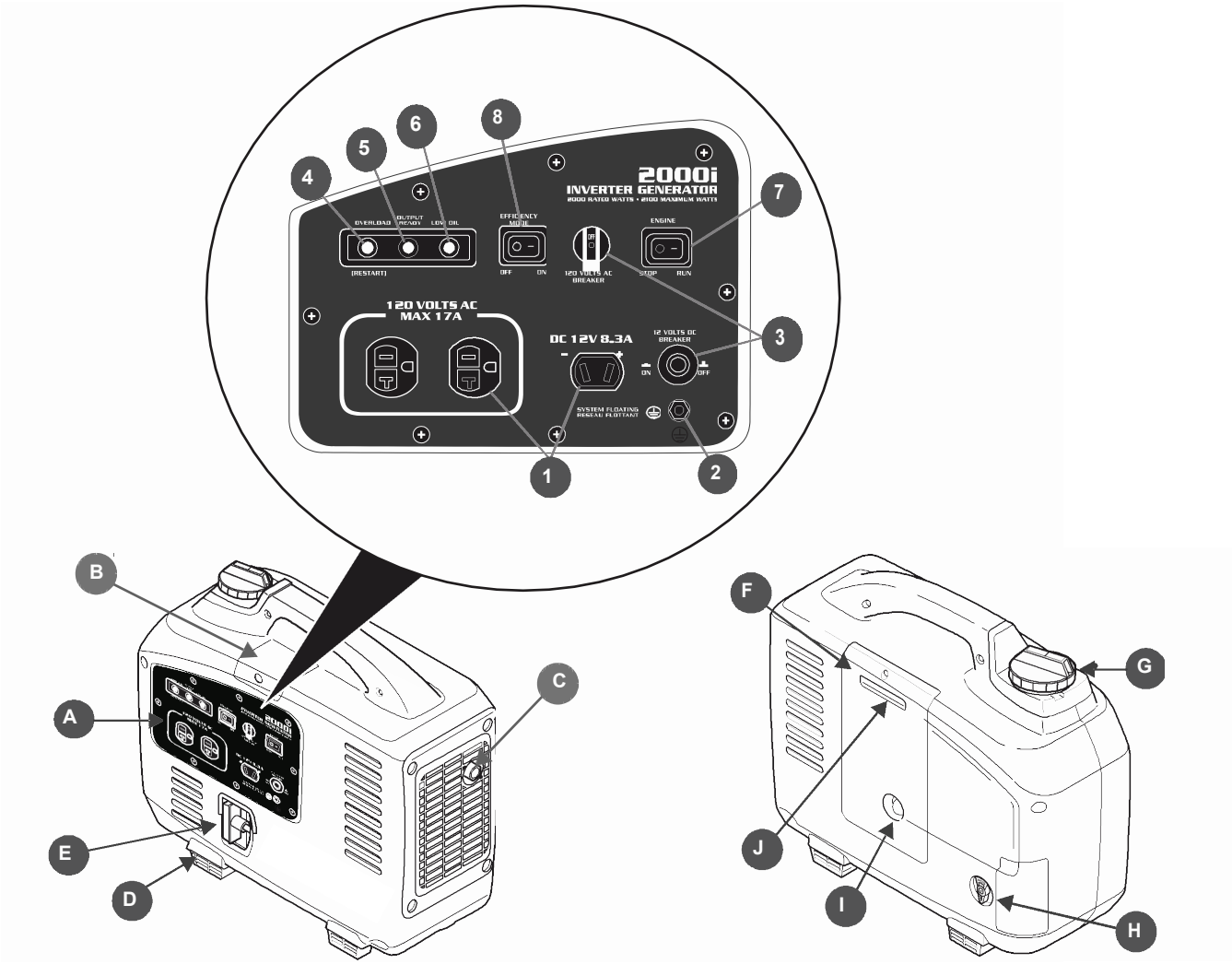
5. *Output Indicator Light*

Illuminates green when the generator is running under normal operating conditions.

6. *Oil Alert Indicator Light*

Illuminates red when low oil conditions are present and the generator is running (or while recoil is pulled). The engine will automatically stop to prevent generator damage.

SF2200 Model



7. *Engine Control Switch*

Turns the engine ON or OFF.

8. *Efficiency Mode Switch*

When Efficiency Mode is ON, the engine speed will automatically adjust based on the connected load, resulting in better fuel consumption and less noise.

In DC operation, set the Efficiency Mode Switch to the OFF position.

B—Top Maintenance Cover
Provides access to the engine spark plug.

C—Muffler
Provides outlet for engine exhaust.

WARNING	
	Muffler reaches temperatures that can cause serious burns if touched. NEVER touch hot surfaces.

D—Case Feet
Provides stability to the generator.

E—Recoil Starter Handle
Starts engine.

F—Back Maintenance Cover
Provides access to air filter, fuel filter, and oil fill cap.

G—Fuel Cap
Provides a secure seal on fuel tank. The SF1000 model has a vented fuel cap.

H—Fuel Valve
Controls flow of fuel from fuel tank to carburetor.

I— Primer Bulb (SF2200 model only)
Provides primer fuel to start engine.

J—Choke Control
Controls choke valve. Choke control must be in the ON position when starting a cold engine.

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OPERATION

Generator Location

When deciding on the location to place your generator, keep in mind the following safety rules:

⚠DANGER

Depressed areas such as construction foundations, pools, or any low-lying areas, can cause carbon monoxide to accumulate. Inhalation of carbon monoxide can kill you in minutes.

- NEVER use generator inside homes, garages, crawl spaces, sheds, or similar enclosed spaces. Use generator only outdoors and far away from windows, doors, and vents.

⚠WARNING

If generator is placed on an uneven or flexible surface, generator could tilt or overturn, causing fuel to spill from gas tank. Spilled fuel could ignite.

- Place generator on firm, level surface and avoid loose sand or snow. If generator is tilted or overturned, fuel spillage may result. Also, if generator is overturned or sinks into a soft surface, sand, dirt, or water may enter generator.

WARNING

NEVER operate generator in rain or snow, or when the generator is set on wet surface.

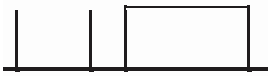
⚠WARNING

Keep generator at least 6 feet (2 meters) away from buildings, other equipment, and combustible materials during operation.

Preparing for Operation

DANGER

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a home or garage, EVEN IF doors and windows are open.

Only use OUTSIDE and far away from windows, doors, and vents.

Before starting generator, complete the following preparation tasks:

Be sure generator is placed outdoors in a well ventilated area.

Check/add engine oil— IMPORTANT! BEFORE STARTING GENERATOR, FILL WITH ENGINE OIL. See page 18 -p. 21 for instructions on filling, checking, and changing oil.

Check/add fuel—ADD FUEL. See page 22.

Check air filter—See “Air Filter Maintenance” on page 23.

Be sure ground terminal is properly connected to earth ground—See “Grounding the Generator” on page 6.

Check extension cords—be sure cords are:

In good condition.

Rated for outdoor use and match amperage and voltage ratings of generator outlet.

Equipped with proper plugs that contain grounding blades.

Starting Generator

⚠WARNING

Before starting generator, be sure to thoroughly read all information provided in this Owner's Manual.

NOTICE

It is very important to maintain the proper level of engine oil to keep the engine in good running condition.

- Check engine oil level prior to each use.

IMPORTANT! BEFORE STARTING GENERATOR, FILL WITH ENGINE OIL.

Starting generator with appliances connected can cause permanent damage to appliances.

- NEVER start generator with electrical appliances plugged in and turned on.
- Do not move the generator while it is running.

1. Fill the fuel tank and check oil is to appropriate level.

NOTE:

The generator starts more easily with a full fuel tank.

2. Place the generator outside on a flat surface free of debris to prevent blocking the air intake vents in the bottom of the generator.

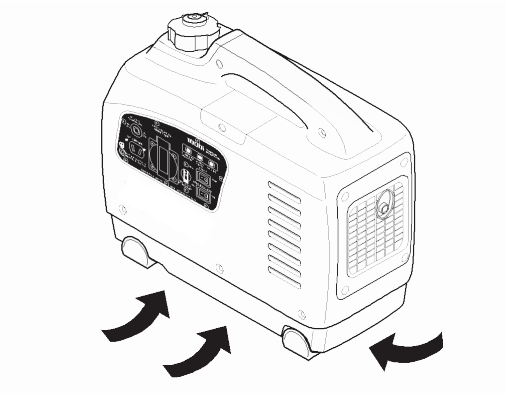


FIGURE 6: Air Intake - DO NOT BLOCK

NOTICE

Blocking the air flow may cause damage to the generator.

3. Connect a ground wire to the generator (see "Grounding the Generator" on page 6).

4. Move the choke to the ON position.

NOTE:

Place the choke in the OFF position when the SF1000 has a warm engine.

5. Set the efficiency mode switch to the OFF position.

FIGURE 7: Efficiency Mode Switch

6. Turn the fuel valve to the ON position.

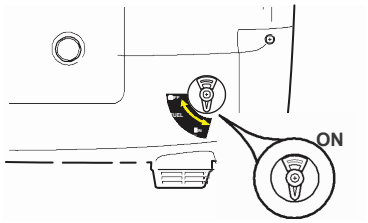


FIGURE 8: Fuel Valve — ON position

7. Press the engine control switch to the RUN position.

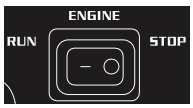


FIGURE 9: Engine Control Switch

8. **SF1000 Model Only:** Turn the fuel cap vent to the ON position.

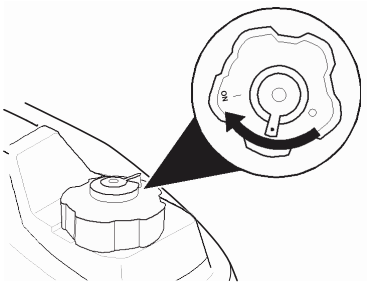


FIGURE 10: Fuel Cap Vent — ON position

SF2200 Model Only: Depress the primer bulb 3 times to supply fuel to start the engine.

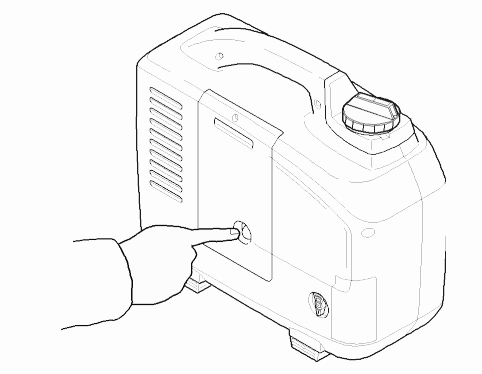


FIGURE 11: Prime Engine

NOTE:

INITIAL START: Depress the primer bulb 30-50 times to prime the fuel lines.

NOTE:

If the generator has a low fuel tank or has been run to empty before being refilled, the primer bulb may need to be depressed 30-50 times to prime the fuel lines.

9. While securing the generator with one hand, grip the recoil starter handle and pull slowly until you feel slight resistance. (SF2200 model illustrated)

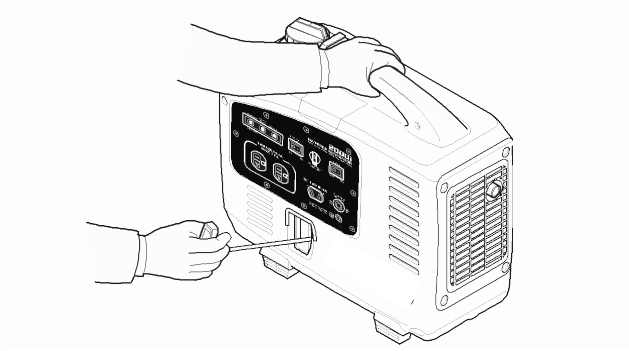


FIGURE 12: Recoil Starter Handle

10. Apply 1 to 4 swift pulls to start the engine, carefully returning the recoil starter handle to the original position.

NOTICE

To prevent damage to the generator, do not allow the recoil starter handle to snap back against the engine.

11. After the engine starts, let run for 2-5 seconds and then slowly move the choke to the OFF position.

12. After starting, confirm the output ready indicator light is green and stays on.

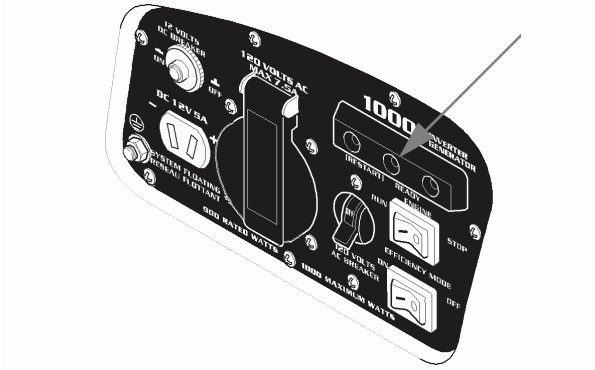


FIGURE 13: Output Ready Indicator Light (SF1000 model)

13. Allow the engine to run continuously and warm up before connecting any appliance.

NOTICE

If the engine stops and will not restart, check the engine oil level before troubleshooting in other areas.

AC Operation

NOTE:

DC power and AC power can be used at the same time.

1. Turn off and unplug all equipment to be plugged into the generator.
2. Start the generator (see “Starting Generator” on page 12).
3. Plug in the appliance and monitor the overload indicator light. If the overload indicator illuminates longer than 4 seconds, STOP THE ENGINE IMMEDIATELY. Do not restart generator until the reason for the overload or appliance short circuit is corrected.

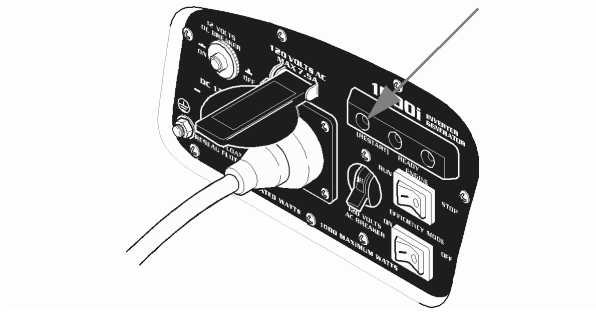


FIGURE 14: Overload Indicator Light (SF2200 model)

CAUTION

Substantial overloading that continuously lights the overload indicator light may damage the generator. Marginal overloading that temporarily lights the overload indicator light may shorten the service life of the generator.

If appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn it OFF immediately. Disconnect appliance and determine whether problem is appliance, or if rated load capacity of generator has been exceeded.

4. Set the efficiency mode switch to the ON position.

FIGURE 15: Efficiency Mode Switch

Stopping Generator

In an emergency:

Press the engine control switch to the STOP position.

In normal use:

1. Turn OFF any connected appliances and unplug any connected power cords.
2. Allow the generator to run for 2-3 minutes.
3. Press the engine control switch to the STOP position.
4. Turn the fuel valve to the OFF position.
5. Turn the fuel cap vent to the OFF position (SF1000 model only).

Low Oil Protection

The oil alert system is designed to avoid engine damage from not enough oil in the crankcase. The oil alert system will stop the engine automatically before the crankcase oil gets below the safety line. The engine will not restart until the required amount of engine oil is added.

NOTE:

Oil alert indicator light only illuminates while generator is running or while recoil is pulled.

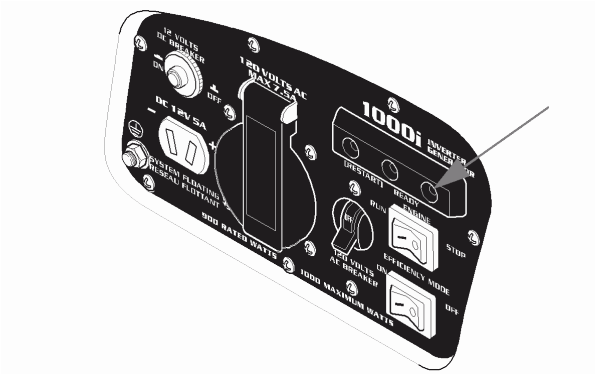


FIGURE 16: Oil Alert Indicator Light

High-Altitude Operation

At high altitudes, standard carburetor air-fuel mixture will be excessively rich. Performance will decrease and fuel consumption will increase.

High-altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor and then readjusting the pilot screws. If you always operate the engine at altitudes higher than 5000 feet (1500 meters) above sea level, have an authorized generator dealer perform this carburetor modification.

Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 1000 foot (300 meters) increase in altitude above sea level. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

NOTICE

If engine jetted for high altitude is used at lower altitude, lean air fuel mixture will reduce performance and may over-heat and seriously damage the engine.

Powering Appliances

NOTE:

In this manual, the term “appliance” refers to any electrical device that can be connected to generator for power.

NOTICE

NEVER start generator with electrical appliances plugged in and turned on.

WARNING

Faulty appliances and power cords can result in electrical shock.

- Before attempting to power an appliance, be sure generator has been properly grounded, and that appliance and power cord are in good working order.
- Keep the generator away from other electric cables or wires including commercial power supply lines.
- Do not use generator for any purpose other than its intended use.
- Do not parallel connect generators or lengthen the exhaust pipe.
- Do not connect generator to any household circuit, otherwise it may destroy generator or home electric equipment.

WARNING

Medical and Life Support Uses

- In case of emergency, call 911 immediately.
- Never use this product to power life support devices or life support appliances.
- Never use this product to power medical devices or medical appliances.
- Inform your electricity provider immediately if you or anyone in your household depends on electrical equipment to live.
- Inform your electrical provider immediately if a loss of power would cause you or anyone in your household to experience a medical emergency.

- **Plan carefully:** Before using the generator to power appliances, take time to add power ratings (wattage) of each appliance and verify that total wattage does not exceed rated output of generator. Power rating information can usually be found on an appliance’s product label, stamped inside, or on the back of the appliance. See Table 2 for a listing of average appliance wattage requirements.
- **NEVER overload:** Circuit breakers will stop the flow of electricity between the generator and appliance if the generator is overloaded. This will be indicated by a “tripped” breaker. If this happens, power off and disconnect appliance(s), wait a few minutes, and then push to reset the circuit breaker.
- **Pay attention to appliance operation:** If appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn it OFF immediately. Disconnect the appliance and determine whether the problem is the appliance, or if rated load capacity of the generator has been exceeded.
- **Use suitable extension cords:** If using an extension cord to connect appliances to the generator, use only UL-listed, three-prong extension cords. Be sure the extension cord is the proper size (wire-gauge) to handle the electrical load that will be plugged into it.

Appliance Wattage Information

Use table below as a guide to determine how much power you will need to run appliances using generator.

CAUTION

The values provided in following table are estimates only.

- ALWAYS verify actual wattage requirements for appliance you will be powering. Check labels inside or on the back of appliance, refer to appliance operating manuals, or contact appliance manufacturer.

Appliance	Typical Running Watts
Air Conditioner, Central*	3500
Air Conditioner, Window*	500-1440
Aquarium	50-1210
Clock Radio	10
Coffee Maker	900-1200
Computer, CPU - Awake / Asleep	120 / 30 or less
Computer, Monitor - Awake / Asleep	150 / 30 or less
Computer, Laptop	50
Dehumidifier*	785
Dishwasher*	1200-2400 (using drying feature greatly increases energy consumption)
Dryer, Electric	1800-5000
Electric Blanket (Single/Double)	60 / 100
Fan, Ceiling*	65-175
Fan, Window*	55-250
Furnace*	750
Hair Dryer	1200-1875
Heater, Portable	750-1500

Appliance Wattage Information

Appliance	Typical Running Watts
Iron	1000-1800
Microwave Oven	750-1100
Radio, Stereo	70-400
Refrigerator, Frost-free, 16 Cubic Feet*	725
Sump Pump, 1/2 hp*	2150
Sump Pump, 1/3 hp*	2300
Television	
• 19"	65-110
• 27"	113
• 36"	133
• 53"-61" Projection	170
• Flat Screen	120
Toaster	800-1400
Toaster Oven	1225
Vacuum Cleaner*	1000-1440
VCR/DVD	17-21 / 20-25
Washing Machine	350-500
Water Heater, 40 gal	4500-5500
Water Pump, Deep Well*	250-1100

TABLE 2. Typical Appliance Running Wattages

*Allow up to three times normal running watts for starting this appliance.

NOTE:

Appliances in grey require a higher wattage output than the inverter generator will produce.

NOTICE

Starting appliances that have motors requires more power. Examples of motorized appliances include refrigerators, water pumps, and furnace blowers. Be sure the appliance power rating does not exceed that of the generator.

CAUTION

Do not run power cords under carpet, rugs, or other materials where heat might build up or cord damage may go unnoticed.

MAINTENANCE

Maintenance Schedule

Periodic maintenance and adjustment are necessary to keep the generator in good operating condition. Perform service and inspection at the intervals shown in the *Generator Maintenance Schedule* (see Table 3).

DANGER

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.

NEVER use inside a home or garage, EVEN IF doors and windows are open.

Only use OUTSIDE and far away from windows, doors, and vents.

- Shut off engine before performing any maintenance. If engine must be run, be sure area is well ventilated.

NOTICE

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any non-road engine repair establishment or individual.

WARNING

Accidental starting of generator can cause severe injury or death. Before performing maintenance, disconnect spark plug cap from spark plug.

WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed. Always follow inspection and maintenance recommendations and schedules in this owner's manual.

NOTICE

The maintenance schedule applies to normal operating conditions. If you operate generator under severe conditions, such as sustained high-load or high-temperature, or use it in unusually wet or dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

MAINTENANCE TASK	FREQUENCY*					
	Before each use	First month or 25 hours of use	Every 3 months or 50 hours of use	Every 4 months or 62.5 hours of use	Every 6 months or 100 hours of use	Every year or 200 hours of use
Fill fuel tank	X					
Check engine oil level	X					
Check air cleaner	X					
Clean air cleaner			X†			
Change engine oil (SF1000)		X				
Change engine oil (SF2200)				X		
Check/clean spark plug					X	
Clean spark arrestor‡					X	
Check/adjust valve clearance						X**
Clean fuel tank and strainer						X**
Check fuel line	Every 2 years (replace if necessary)**					

TABLE 3. Generator Maintenance Schedule

* Perform at every indicated month or operating hour interval, whichever comes first.
† Clean more often when using generator in dusty areas.
‡ SF2200 model only.
** It is recommended that this maintenance task be performed by a service dealer.

Engine Oil

NOTICE
Engine oil is a major factor affecting engine performance and service life. Non-detergent and 2-stroke engine oils will damage engine and are not recommended.
• Be sure to use engine oils specified under “Engine Oil Recommendations.”
It is very important to maintain proper level of engine oil to keep engine in good running condition.
• Check engine oil level prior to each use. Refill engine oil if oil level is low.

Engine Oil Recommendations

Use 4-stroke oil, or equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for API Performance Class SF or better. SAE 15W-40 is recommended for general, all-temperature use.

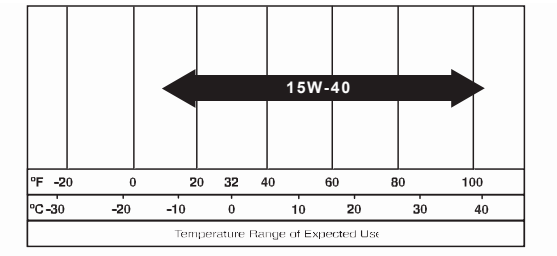


FIGURE 17: Recommended Oil Viscosity

Checking Engine Oil Level

To check engine oil level:

1. Stop the generator if the engine is running.

WARNING	
	Crankcase pressure can cause hot engine oil to spray out of engine fill hole. Hot engine oil can cause severe burns.
• ALWAYS stop engine before removing the oil fill cap.	

2. Place the generator on a flat, level surface.
3. Remove the back maintenance cover using the Phillips end of the universal screwdriver bit.
4. Remove the oil fill cap.

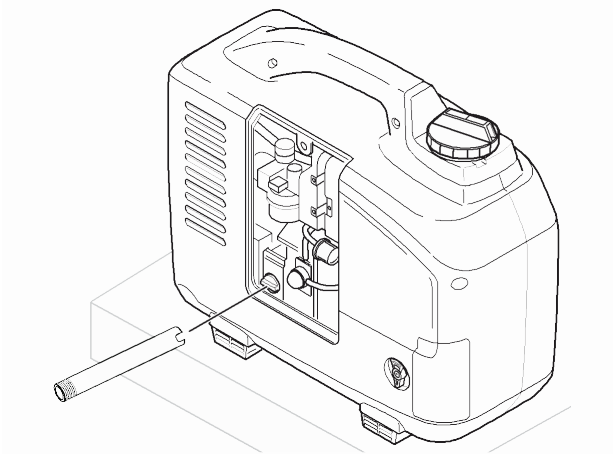


FIGURE 18: Oil Fill Cap Removal

5. Check the oil level is up to the innermost thread of the crankcase.

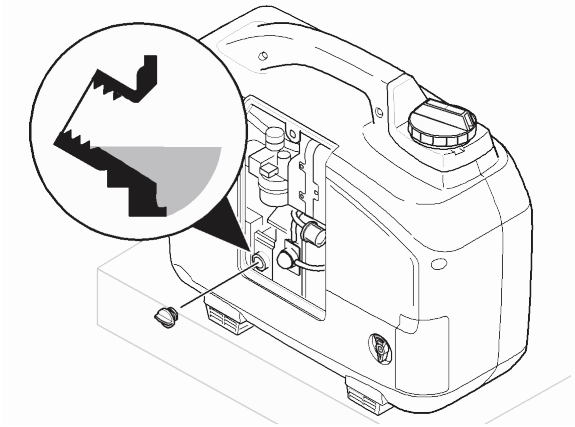


FIGURE 19: Oil Fill Measurement

To add engine oil:

6. During initial fill or when the oil level is low, add oil (see “Engine Oil Recommendations”) to the oil fill container (included). DO NOT OVERFILL.

	HW1000i	SF2200
Oil Capacity [qt / ml]	0.26 / 250	0.48 / 450

TABLE 4. Engine Oil Capacity

7. Using a clean cloth, wipe around the drain plug area to remove any dirt and debris.
8. Insert the flexible hose directly into the oil fill hole and fill to the innermost thread of the crankcase.
   (SF2200 model illustrated)

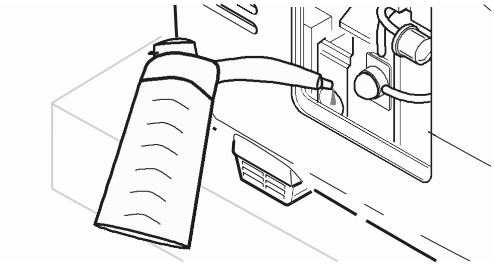


FIGURE 20: Adding Engine Oil

NOTICE

- NEVER fill the generator with oil by tilting or laying the unit on its side. This will result in oil overflow and oil to pool inside the case.
- Low oil levels will cause the low oil protection feature to shut off the generator to prevent engine damage.

9. Reinstall the oil fill cap until fully tightened, center the choke, and attach the back maintenance cover.

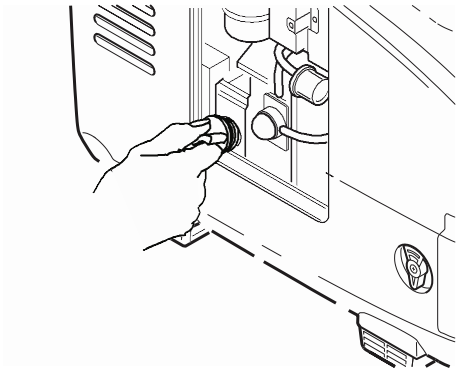


FIGURE 21: Oil Fill Cap Installation

Changing Engine Oil

⚠WARNING

Frequent or prolonged contact with engine oil may cause skin cancer.

- Immediately after handling engine oil, thoroughly wash hands and any areas of skin exposed to engine oil, with soap and water.

To change engine oil, you will need:

- Oil drain pipe
- Oil fill container
- Screwdriver handle
- Screwdriver universal bit
- New (unused) engine oil
- Oil drain pan
- Clean cloth

1. Place the generator on a flat, level, slightly raised surface (SF2200 model illustrated).

CAUTION

Generator is heavy! Obtain assistance to lift the generator to avoid back or other bodily injury.

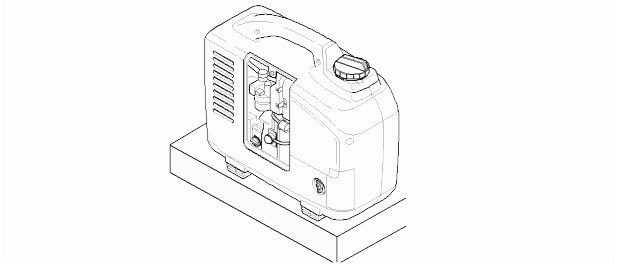


FIGURE 22: Generator on Raised Surface

2. Drain the fuel into a suitable container (see page 26).
3. Start the engine and run until warm.
4. Stop the engine and place the engine switch in the OFF position.

WARNING

Crankcase pressure can cause hot engine oil to spray out of the engine fill hole. Hot engine oil can cause severe burns.

- ALWAYS stop engine before removing the oil fill cap.

5. Remove the back maintenance cover using the Phillips end of the universal screwdriver bit.

Engine Oil

6. Place the oil pan, or other container suitable for holding engine oil, in front of the generator.

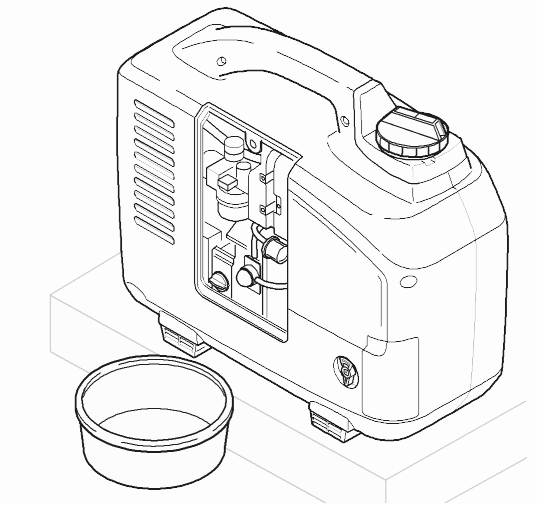


FIGURE 23: Oil Drain Pan

7. Remove the oil fill cap.

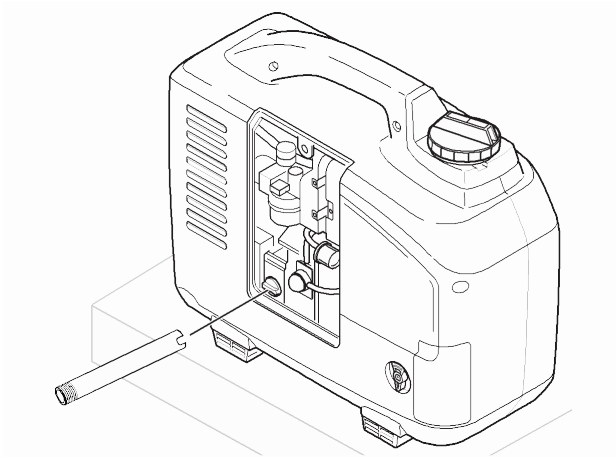


FIGURE 24: Oil Fill Cap Removal

8. Attach the oil drain pipe (do not over tighten) and tilt the generator allowing the oil to completely drain into the oil pan.

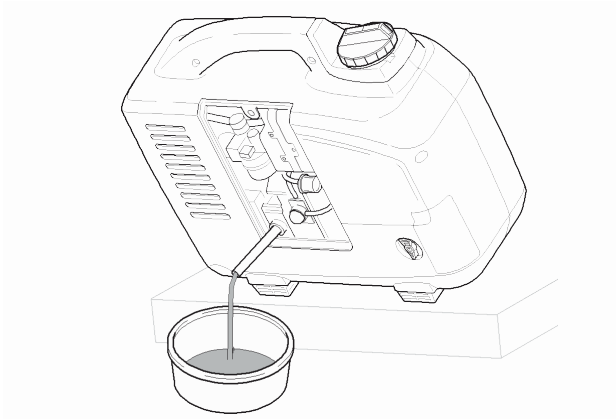


FIGURE 25: Drain Oil (SF2200 Model)

⚠CAUTION	
	Generator is heavy! Obtain assistance to lift the generator to avoid back or other bodily injury.

9. Return the unit to the upright position.
10. Remove the oil drain pipe.
11. Using a clean cloth, wipe around the drain plug area to remove any dirt and debris.
12. Fill the oil fill container (included) with the appropriate amount and type of new (unused) oil. (See Figure 17 for recommended oil type.)

	SF1000	SF2200
Oil Capacity [qt / ml]	0.26 / 250	0.48 / 450

TABLE 5. Engine Oil Capacity

13. Slowly pour oil into the oil fill hole. DO NOT OVER-FILL.

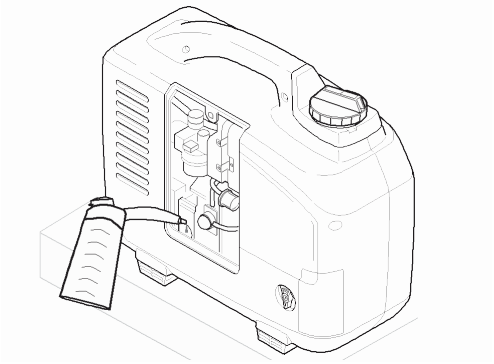


FIGURE 26: Adding Engine Oil

14. Check the oil level is up to the innermost thread of the crankcase.

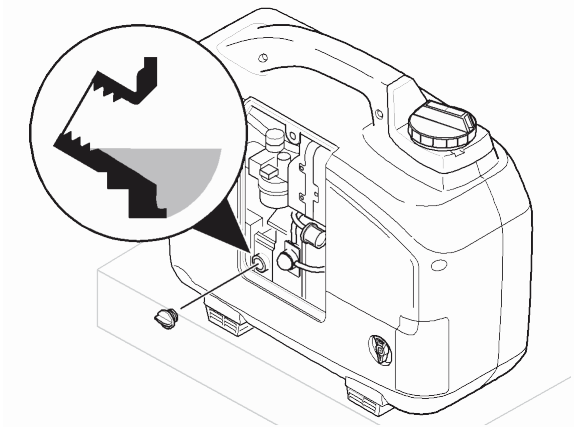


FIGURE 27: Oil Fill Measurement

15. Reinstall the oil fill cap until fully tightened, center the choke, and attach the back maintenance cover.

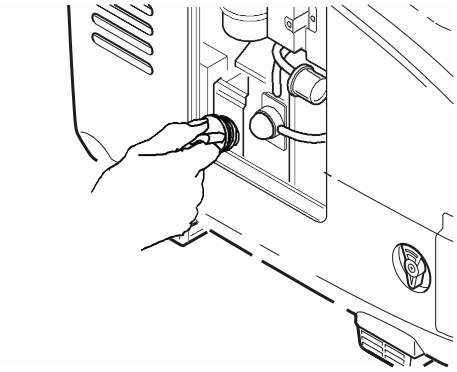


FIGURE 28: Oil Fill Cap Installation

NOTE:

Dispose of used motor oil according to guidelines established by your local or state government.

Engine Fuel

Before each use, fill the fuel tank with recommended fuel. DO NOT OVERFILL.

⚠ DANGER

Fuel and fuel vapors are extremely flammable and explosive under certain conditions.

- Refuel the generator only outdoors, in a well-ventilated area.
- NEVER fill the fuel tank while engine is running. Turn generator OFF and allow to cool before filling with fuel.
- NEVER smoke or allow flames or sparks near generator or where gasoline is stored.
- NEVER overfill the fuel tank (no fuel should be in filler neck). After refueling, be sure the fuel cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, be sure the area is dry before starting engine.
- Avoid repeated or prolonged contact with skin or breathing vapor.
- Avoid body contact with any fuels, oil, and lubricants used in the generator. If swallowed, seek medical treatment immediately. Do not induce vomiting if fuel is swallowed. For skin contact, wash with soap and water immediately. For eye contact, immediately flush eyes with clean water and seek medical attention.

General Fuel Information

Refill the fuel tank carefully to avoid spilling fuel. Do not fill above the shoulder of the fuel strainer. Use unleaded gasoline with a pump octane rating of 87 or higher.

Never use stale or contaminated gasoline. Avoid getting dirt or water in the fuel tank. Always keep fuel strainer in place while refueling.

Oxygenated Fuels

At certain times of the year, some U.S. locations may have only oxygenated fuel available. Oxygenated fuel is blended with alcohol or other additives to increase octane quality, enhance combustion, and reduce exhaust emissions. Some areas of the United States use oxygenated fuels to help meet clean air standards.

Before using an oxygenated fuel, ensure pump octane rating is 87 or higher.

Some states (and provinces in Canada) require this information to be posted on the fuel pump. If you notice undesirable operating symptoms, switch to a conventional unleaded gasoline.

NOTICE

Oxygenated fuels can damage paint and plastic. Be careful not to spill fuel when filling the fuel tank. Damage caused by spilled fuel is not covered under warranty.

Ethanol (ethyl or grain alcohol)	Gasoline containing more than 10% ethanol by volume may cause starting or performance problems. Gasoline containing ethanol may be marketed under the name "Gasohol".
Methanol (methyl or wood alcohol)	Gasoline containing methanol must contain co-solvents and corrosion inhibitors to protect fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems and may damage metal, rubber and plastic parts of fuel system.
MTBE (methyl tertiary butyl ether)	You can use gasoline containing up to 15% MTBE by volume.

TABLE 6. Oxygenated Fuel Types

Adding Fuel

NOTICE

To avoid damage to engine, never use stale or contaminated gasoline or oil/gasoline mixture. Avoid getting dirt or water in fuel tank.

Use fresh gasoline with a pump octane rating of 87 or higher.

1. Stop the generator if the engine is running. Allow to completely cool.
2. Place the generator on a flat, level surface.
3. Remove the fuel cap.

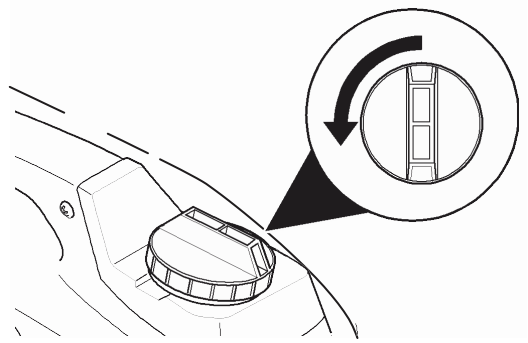


FIGURE 29: Adding Fuel (SF2200 model illustrated)

4. Slowly pour gasoline into the fuel tank. Be careful not to overfill.

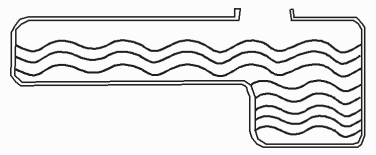
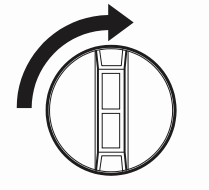


FIGURE 30: Fuel Level

5. Reinstall the fuel cap and fully tighten.



NOTE:

Occasional, light spark knock, "pinging", or rattling noise is normal while operating under heavy loads. If spark knock, pinging, or rattling occurs at a steady engine speed, under normal load, drain the fuel (page 26) and refill with fresh gasoline. If the noise persists, see an authorized generator dealer.

NOTICE

Running the engine with persistent spark knock or pinging can cause engine damage. Warranty does not cover parts damaged by misuse.

Cleaning Fuel Strainer

The fuel strainer helps prevent residue from entering the carburetor. Clean the fuel strainer at the intervals specified in Table 3.

To clean fuel strainer, you will need:

Household soap and water

Clean, dry cloth

To clean fuel strainer:

1. Stop the generator if the engine is running. Allow to completely cool.
2. Place the generator on a flat, level surface.
3. Remove the fuel cap (A) and fuel strainer (B).

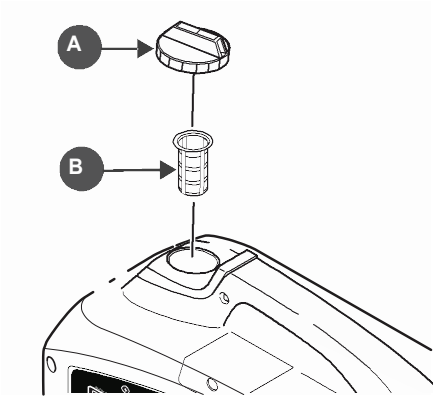


FIGURE 31: Fuel Strainer Removal

4. Clean the fuel strainer with soap and water.
5. Wipe the fuel strainer clean with a clean, dry cloth.
6. Gently reinstall the fuel strainer and replace the fuel cap.

Air Filter Maintenance

NOTICE
A dirty air filter will restrict air flow to the carburetor, which may cause poor engine performance or damage. Never run the generator without the air cleaner assembly properly attached.

Clean the air cleaner filter every 50 hours of generator operation. If the generator is operated in extremely dusty areas, clean the air filter more frequently.

WARNING	
- -	Gasoline and flammable solvents can cause fire or explosion. NEVER use gasoline or flammable solvent to clean air cleaner element.
• Use only household soap and water to clean the air filter.	

To clean air filter, you will need:

- Screwdriver handle
- Screwdriver universal bit
- Household soap and water
- Clean, dry cloth
- Clean engine oil

1. Stop the generator if the engine is running. Allow to completely cool.
2. Remove back maintenance cover (A), air filter cover (B), and air filter (C).

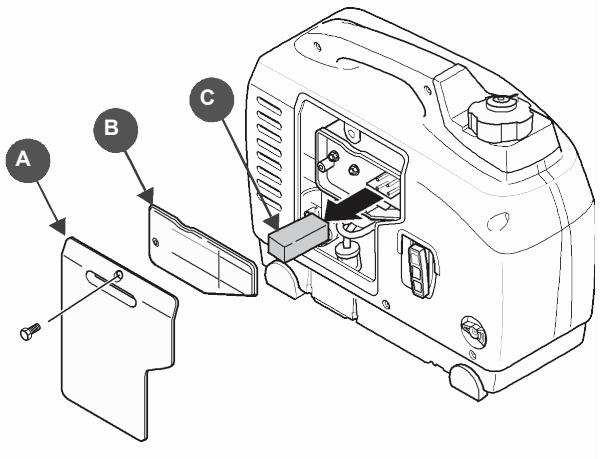


FIGURE 32: Air Filter Removal - SF1000 Model

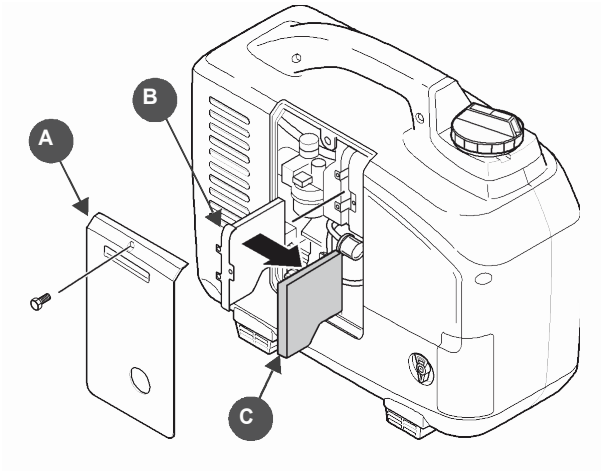


FIGURE 33: Air Filter Removal - SF2200 Model

3. Wash the air filter in a solution of household soap and warm water.

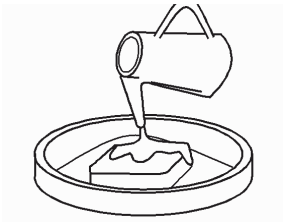


FIGURE 34: Wash Air Filter

4. Using a clean, absorbent cloth, squeeze the air cleaner element dry, being careful not to twist or tear the filter.

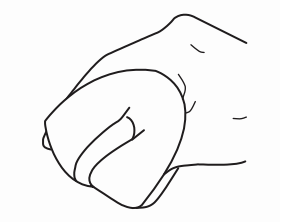


FIGURE 35: Dry Air Filter

5. Soak the air filter in clean engine oil.

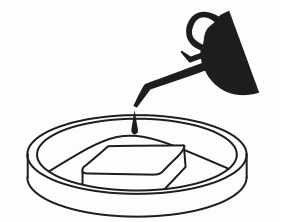


FIGURE 36: Air Filter Oiling

6. Squeeze out excess oil.

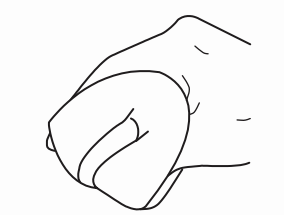


FIGURE 37: Excess Oil Removal

7. Reinstall the air filter and air filter cover.

NOTE:

For the SF1000 model, carefully place filter between air filter support pegs without tearing filter. See illustration below.

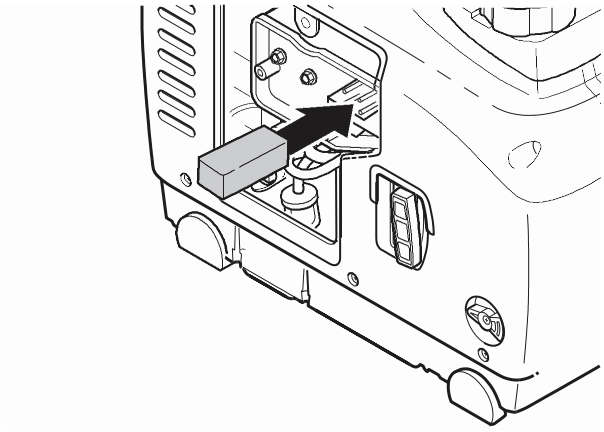


FIGURE 38: Air Filter Installation - SF1000 Model

8. Place the choke in the center position to allow it to clear the back maintenance cover opening and reinstall the back maintenance cover.

CAUTION

Frequent or prolonged contact with engine oil may cause skin cancer.

- Thoroughly wash hands and any areas of skin exposed to used oil with soap and water.

NOTE:

The engine will smoke during initial start-up if too much oil is left in the filter.

Cleaning Spark Arrestor Screen (SF2200 Model Only)

WARNING

Muffler reaches temperatures that can cause serious burns if touched. NEVER touch hot surfaces.

The generator muffler is equipped with a spark arrestor screen, which must be cleaned according to the maintenance schedule (Table 3).

To clean the spark arrestor screen, you will need:

Screwdriver handle

Screwdriver universal bit

Wire brush

1. Stop the generator if the engine is running. Allow to completely cool.
2. Place the generator on a flat, level surface.
3. Remove the muffler cover and spark arrestor screws using the Phillips end of the universal screwdriver bit.

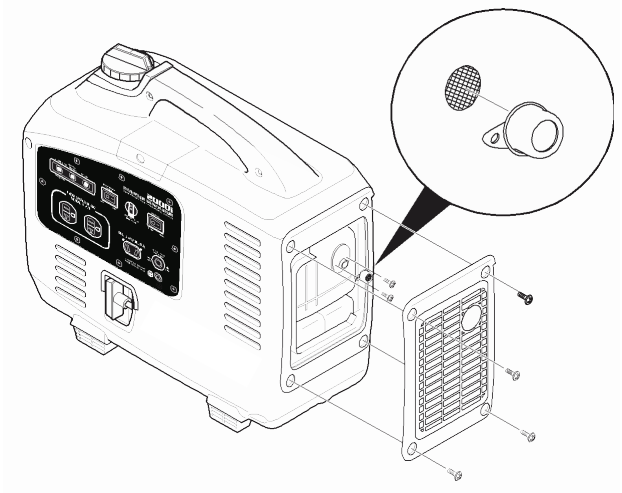


FIGURE 39: Remove Spark Arrestor and Muffler Cover

4. Using the standard screwdriver bit, loosen the spark arrestor by gently working it back and forth on both sides being careful not to bend the arrestor tabs.
5. Inspect the spark arrestor screen.

   If the screen is damaged or excessively worn, replace with a new spark arrestor.

   If the screen is in good condition, clean using a wire brush and reinstall.

NOTE:

If the spark arrestor screws appear misaligned, rotate the spark arrestor 180 degrees.

6. Reinstall spark arrestor screws, muffler cover, and muffler screws.

Spark Plug Service

To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

WARNING

If the engine has been running, the muffler will reach temperatures that could cause severe burns. DO NOT TOUCH.

Recommended Spark Plug Replacement: 101566A*

	HW1000i	SF2200
NGK	CR5HSA	CR6HSA
Bosch	--	UR6AC
Champion	--	P-RZ9HC
Denso	U16FSR-U	U20FSR-U

TABLE 7. Spark Plug Equivalents

To service the spark plug, you will need:

- Clean cloth
- Spark plug wrench
- New spark plug (if existing spark plug is excessively worn or damaged)
- Wire brush
- Spark plug gauge (for setting spark plug gap)

1. Stop the generator if the engine is running. Allow to completely cool.
2. Place the generator on a flat, level surface.
3. Remove the top maintenance cover.
4. Remove the spark plug cap.

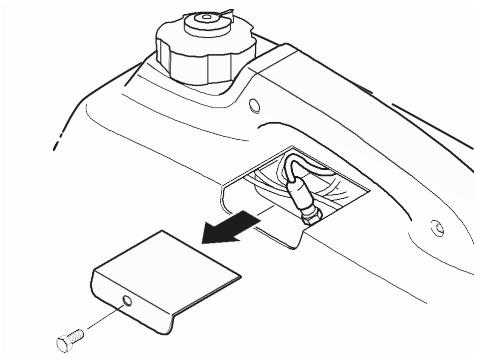


FIGURE 40: Spark Plug Cap Removal

5. Clean any dirt from around spark plug base.
6. Using the spark plug wrench, loosen and remove the spark plug.

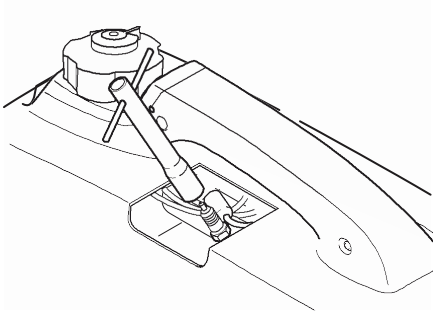


FIGURE 41: Spark Plug Removal

7. Inspect the spark plug.

   If spark plug is damaged or excessively worn, or if insulator is cracked or chipped, use a new spark plug.

   If the spark plug is in good condition, clean spark plug with wire brush.

8. Measure spark plug gap with spark plug gauge.

   Gap should be: 0.024-0.028 in. (0.60-0.70 mm).

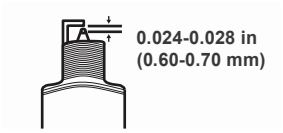


FIGURE 42: Correct Spark Plug Gap

9. If necessary, adjust gap by carefully bending side electrode.
10. Inspect spark plug washer and verify it is in good condition.
11. Reinstall the spark plug by hand to prevent cross-threading.
12. After the spark plug is seated, tighten with the spark plug wrench to compress the washer.

    If installing a new spark plug, tighten l/2 turn after the spark plug seats to compress the washer.

    If reinstalling a used spark plug, tighten l/8 - l/4 turn after the spark plug seats to compress the washer.

13. Reinstall the top maintenance cover.

NOTICE

The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and could damage engine. Never use spark plugs that have an improper heat range. Use only recommended spark plugs or equivalent.

* See *Maintenance Parts* at the end of this manual.

Transporting Generator

WARNING

Hot engine or exhaust system can cause serious burns or fires. Cool generator completely before transporting or storing.

Do not leave generator inside vehicle during high temperatures. This could cause the fuel to vaporize and possibly explode.

Do not overfill the tank before transporting.

Do not drive across rough terrain while transporting the generator as this may cause fuel leakage. Drain fuel from generator.

Do not operate generator while it is in a vehicle.

When transporting the generator:

1. Press the engine control switch to the OFF position.
2. Turn the fuel valve to the OFF position.
3. Turn the fuel cap vent to the OFF position (SF1000 model only).
4. Keep the generator level to prevent fuel spillage.

NOTICE

To avoid damage to the generator, take care not to drop or strike the generator when transporting. Do not place heavy objects on the generator.

Storing Generator

NOTICE

Follow service procedures for preparing generator for storage. Inadequate or improper care of generator can result in damage to generator components and will void limited warranty.

Before storing the generator for extended period of time:

- Be sure storage area is free of excessive humidity and dust.
- Refer to Table 8 for recommended preparation procedures.

Storage Time	Recommended Preparation
Less than 1 month	No preparation required.
1 to 2 months	Fill fuel tank with fresh gasoline and add gasoline conditioner*.
More than 2 months	See procedure below.

TABLE 8. Recommended Service Procedures Based on Storage Time

* Use gasoline conditioners formulated to extend storage life. Contact authorized generator dealer for conditioner recommendations.

To prepare the generator for long-term storage:.

DANGER

Fuel and its vapors are extremely flammable and explosive under certain conditions.

- NEVER smoke or allow flames or sparks near generator or where gasoline is stored.

1. Drain the fuel into a suitable container (see page 26).
2. Change the engine oil (see page 19).
3. Remove the spark plug. Add a tablespoon of clean engine oil into spark plug hole.
4. Place a rag over the spark plug hole and pull the recoil starter handle slowly to turn engine and distribute the oil. Reinstall the spark plug.

   At this point, the piston is coming up on its compression stroke and both intake and exhaust valves are closed. Storing engine in this position will help to protect it from internal corrosion.

Draining Fuel

1. Turn the fuel valve to the OFF position.

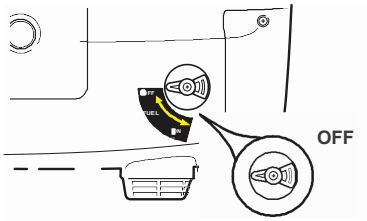


FIGURE 43: Fuel Valve — OFF position

2. Run the engine until it stops due to lack of fuel.
3. Place a suitable container adjacent to the generator.
4. Remove the fuel cap and drain all the fuel into a container.

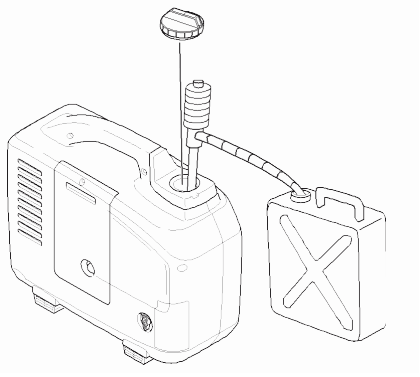


FIGURE 44: Draining Fuel

5. When ready to put the generator back into operation, refill with fresh fuel (see page 22).

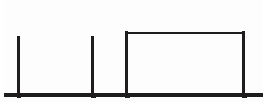
TROUBLESHOOTING

WARNING

ANYONE using or servicing the generator must read, understand, and follow all safety and operation instructions provided in the product manual. Failure to closely follow these instructions can result in circumstances leading to death, serious injury, and property damage.

DANGER

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a home or garage, EVEN IF doors and windows are open.

Only use OUTSIDE and far away from windows, doors, and vents.

NOTE:

For all customer service inquiries, call 01646 663848 or visit www.Evopower.co.uk.

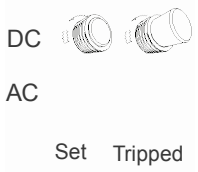
PROBLEM	PROBABLE CAUSE	SOLUTION
Engine will not start or starts and runs rough	Engine switch or fuel valve off.	Turn engine switch or fuel valve on.
	No fuel.	Add fuel (page 22).
	Stale fuel.	Drain fuel tank; fill with fresh fuel (page 22).
	No or low engine oil.	Add engine oil (page 19).
	Spark plug wire (cap) disconnected.	Install spark plug cap over spark plug.
	Faulty/bad spark plug.	Check/replace spark plug (page 25).
	Fuel not reaching carburettor.	Pump fuel in the carburettor. (SF2200 model
	Dirty air filter.	Clean or replace air filter (page 23).
	Dirty spark arrestor screen.	Clean spark arrestor screen (page 24).
Engine suddenly stops	No fuel.	Add fuel (page 22).
	No or low engine oil.	Add engine oil (page 19).
Low power at receptacles	Dirty air filter.	Clean or replace air filter (page 23).
	Dirty spark arrestor screen.	Clean spark arrestor screen (page 24).
	Stale fuel.	Drain fuel tank; fill with fresh fuel (page 22).
No power at receptacle	Electrical overload on generator.	Check circuit breaker for “tripped’ position or overload indicator light on. Reduce electrical load on circuit, wait several minutes, and then push to reset circuit breaker. 
	Circuit breaker defective.	Replace circuit breaker.
	Poor connection or defective cord set.	Check cord connection. Replace defective cord set.
	Connected electrical appliance/ equipment is defective.	Check electrical appliance/equipment for defects. Disconnect defective appliance/equipment from the generator. Have appliance serviced by qualified repair facility.

TABLE 9. Troubleshooting — Probable Causes and Solutions

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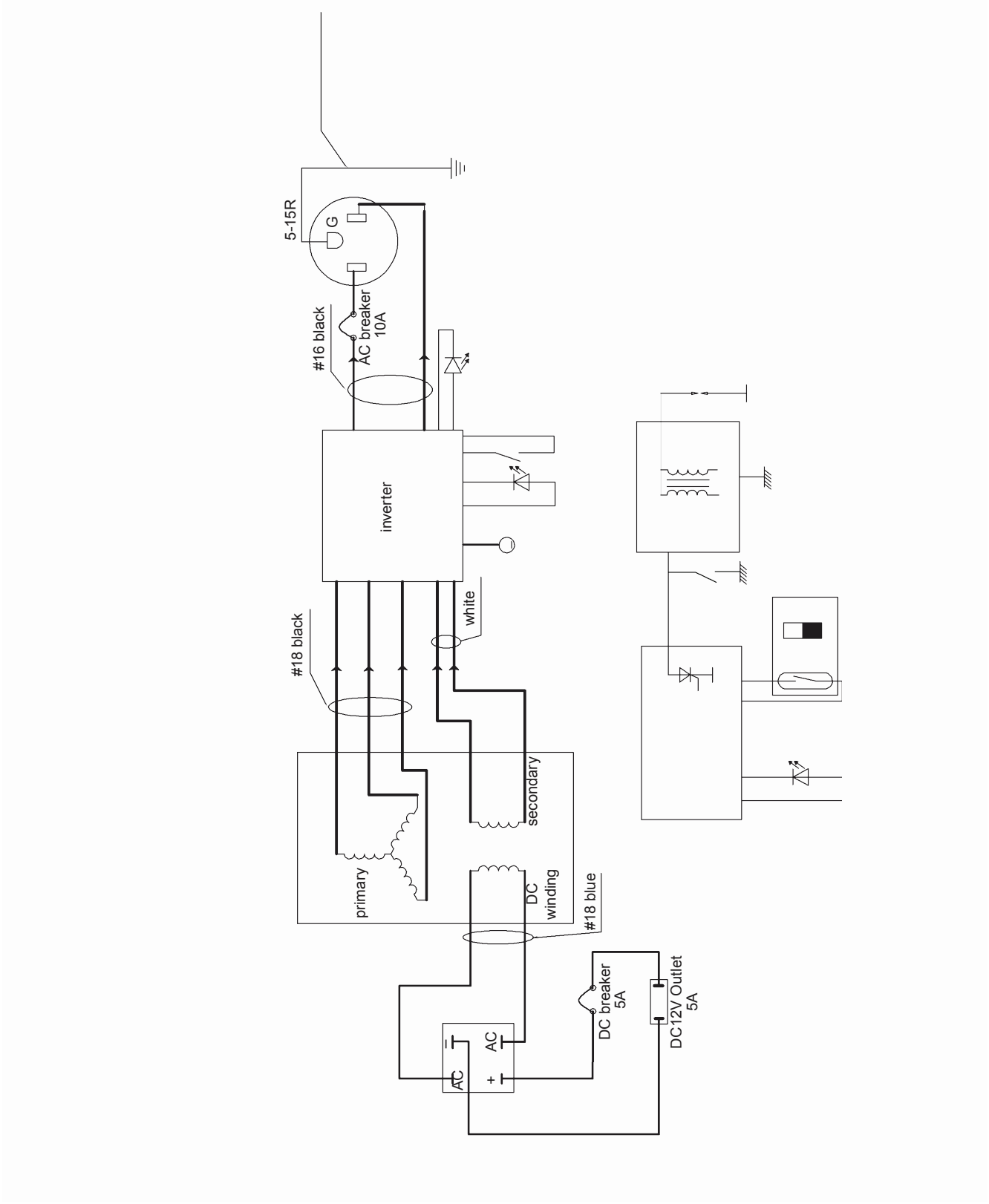
SPECIFICATIONS AND WIRING DIAGRAMS

Model	SF1000	SF2200
DIMENSIONS		
Length [in / mm]	18.1 / 459.7	21.3 / 541
Height [in / mm]	15.1 / 383.5	20.0 / 508
Width [in / mm]	9.6 / 243.8	11.4 / 289.6
Dry Weight [lb / kg]	30 / 13.6	58 / 26.3
POWER OUTPUT		
Rated (AC) [watts]	900	2000
Rated (DC) [watts]	60	100
Frequency* [hertz]	60	60
Voltage (AC)* [volts]	120	120
Voltage (DC)* [volts]	12-18	12-18
OPERATING TEMPERATURE		
Maximum [F / C]	104 / 40	104 / 40
Minimum [F / C]	14 / -10	14 / -10
ENGINE		
Speed [rpm]	5400**	5000**
Type	OHV 4-cycle	OHV 4-cycle
Displacement [cc]	53	125
Fuel Tank Capacity [gal / L]	0.7 / 2.6	1.5 / 5.7
Engine Oil Capacity [qt / ml]	0.26 / 250	0.48 / 450
Spark Plug Gap [in /mm]	0.024-0.028 / 0.6-0.7	0.024-0.028 / 0.6-0.7
* Under load		
**Efficiency switch in OFF position		

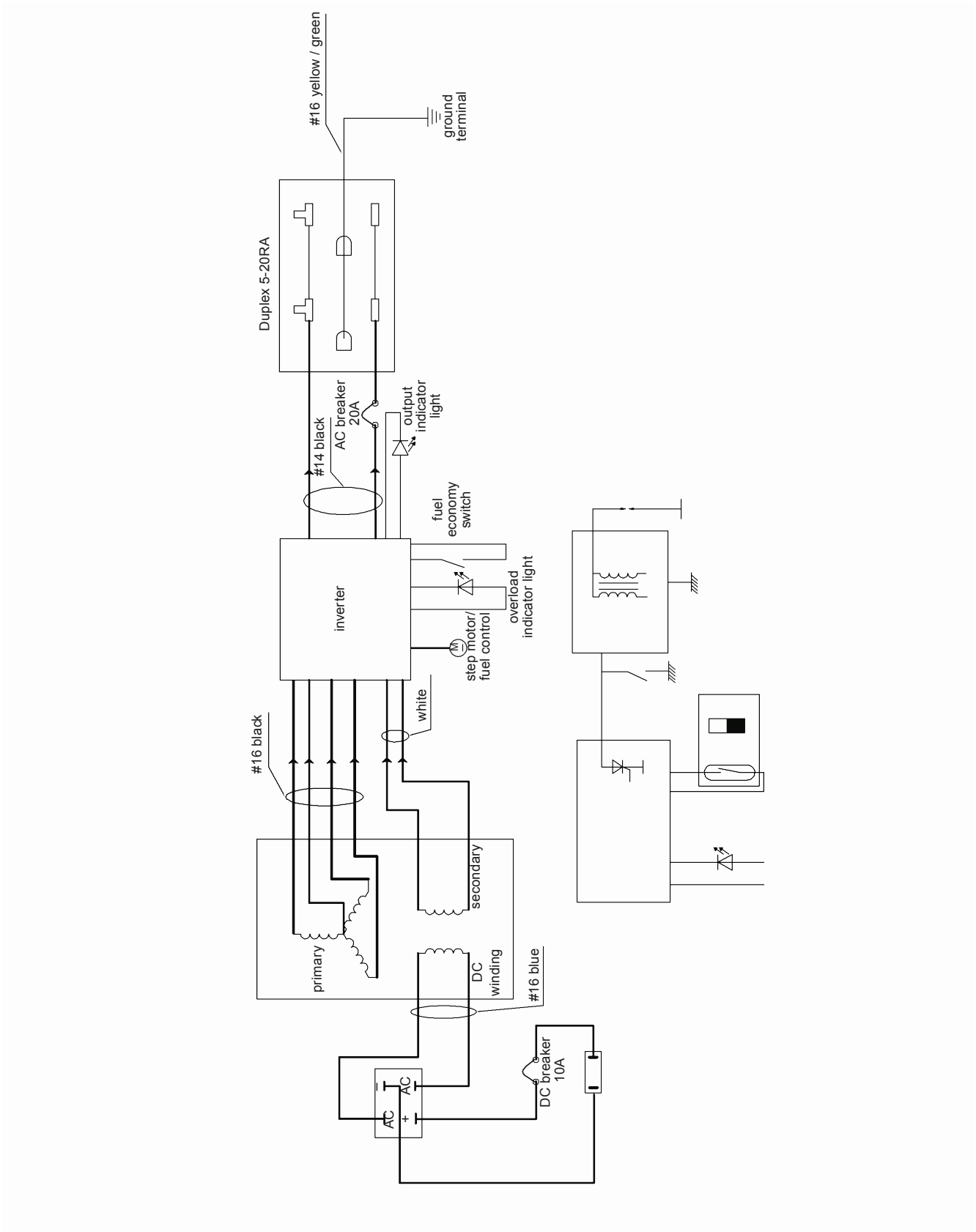
TABLE 10. SF1000 / SF2200 Inverter Generator Specifications

WIRING DIAGRAMS

SF1000 Model



SF2200 Model



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WARRANTIES

EVOPOWER CONSUMER LIMITED WARRANTY

Evopower Inverter Generator

Effective November 1, 2008

LIMITED WARRANTY

Genpower cover any parts found by our own engineers to be defective in material or workmanship. This limited warranty covers the cost of the replacement parts and labour for defects. Transportation charges are the responsibility of the customer and generators must be returned to us to be assessed. This limited warranty has time period conditions, operating conditions and disclaimers, limitations of remedies & exclusions as stated below. For warranty service, customer should locate an authorized Evopower Generator Dealer, or visit www.evopower.co.uk or by calling 01646 663848.

LIMITED WARRANTY PERIODS

No warranty for commercial or rental use.

Commencement and Definitions. The limited warranty period begins on the date of retail purchase by the original pur- chaser. The limited warranty is not transferable. "Consumer use" is personal use by a retail customer. "Commercial use" is any usage for income producing, business related use.

No Extension of Warranty. Repair or replacement pursuant to this limited warranty shall not renew or extend the original warranty period, and any repaired product shall be warranted for the remaining original warranty period only.

DISCLAIMERS, LIMITATIONS OF REMEDIES & EXCLUSIONS

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

MEDICAL AND LIFE SUPPORT USES. This warranty excludes any use of this product intended to power life support devices, life support appliances, medical devices, or medical appliances.

DISCLAIMER OF OTHER WARRANTIES. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THIS LIMITED WARRANTY IS EXCLUSIVE AND EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER IMPLIED WARRANTIES THAT MAY ARISE FROM A COURSE OF DEALING OR USAGE OF TRADE. NSP HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES. To the extent that NSP's products are consumer products under applicable federal or state law with respect to any customer, the duration of any implied warranties (including, but not limited to, implied warranties of merchantability or fitness for a particular purpose) are limited to the shortest duration permitted by applicable law or the limited warranty period provided herein, whichever is longer.

LIMITATIONS OF REMEDIES. NSP SHALL NOT BE LIABLE TO CUSTOMER, OR TO ANYONE CLAIMING UNDER CUSTOMER, FOR ANY OTHER OBLIGATIONS OR LIABILITIES, INCLUDING, BUT NOT LIMITED TO, OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR WARRANTY, NEGLIGENCE OR OTHER TORT OR ANY THEORY OF STRICT LIABILITY, WITH RESPECT TO THE GENERATOR OR NSP'S ACTS OR OMISSIONS OR OTHERWISE. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, NSP SHALL NOT, IN ANY EVENT, BE LIABLE FOR INCIDENTAL, COMPENSATORY, PUNITIVE, CONSEQUENTIAL, INDIRECT, SPECIAL OR OTHER DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF INCOME, LOSS OF TIME, LOSS OF SALES, INJURY TO PERSONAL PROPERTY, OR LIABILITY CUSTOMER INCURS WITH RESPECT TO ANY OTHER PERSON, OR ANY OTHER TYPE OR FORM OF CONSEQUENTIAL DAMAGE OR ECONOMIC LOSS.

EXCLUSIONS. In addition to the foregoing disclaimers, limitations and terms, this limited warranty shall not apply to and does not cover accessories, nor does it cover products that are in any way subjected to: (i) improper setup, installation or storage; (ii) lack of proper maintenance and service; (iii) accident, damage, abuse or misuse; (iv) abnormal operating conditions or applications; (v) repair or modification by customer or any third party without prior written consent of NSP; (vi) use under operating conditions or in applications not made known to or contemplated by NSP; or (viii) acts of God. The application of these exclusions will be determined at NSP's sole discretion.

REGISTRATION

Warranty registration with the Company is required on all products. You may send in the enclosed Product Registration or register your product on-line at www.evopower.co.uk.

Warranty is also available by keeping and showing your original receipt from date of purchase to an authorized Evopower Generator Dealer.

GENERATOR SERVICE

Do not return your generator to place of purchase for service. For all customer service inquiries, call 01646 663848 or visit www.evopower.co.uk.

Warranty inquiries can be addressed to:

Genpower Ltd

Unit 1, Dowty Park

Thornton Industrial Estate

Milford Haven

SA73 2RS

United Kingdom

NORTHSHORE POWER SYSTEMS EMISSIONSNTROL WARRANTY

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MAINTENANCE PARTS

To order maintenance parts, visit **www.evopower.co.uk** or call Customer Hotline on 01646 66 38 48.

Part Name	SF1000 Part Number	SF2200(e) Part Number
120V Outlet(s)	101582A	101626A
Air Filter	101567A	101611A
Carburetor Assembly	101579A	101623A
Cover, Back Maintenance	101573A	101616A
Cover, Top Maintenance	101574A	101617A
Oil Fill Cap	101571A	101615A
Feet, Case	101581A	101625A
Fuel Cap	101569A	101613A
Fuel Valve	101576A	101620A
Fuel Strainer	101570A	101614A
Harness, DC Charging	101572A	101572A
Ignition Coil	101575A	101618A
Labels, Safety (All)	101580A	101624A
Oil Fill Container	101568A	101612A
Primer Bulb	N/A	101619A
Recoil Assembly	101578A	101622A
Screw, Back Maintenance Cover	101577A	101621A
Screw, Top Maintenance Cover	101759A	101759A
Spark Plug	101566A	101566A

SF1000/SF2200 Maintenance Parts List

For part numbers of replacement product labels, see page 3.

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